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III. Remarks

Applicants are grateful to the Examiner for recognizing the allowable subject matter set forth in Claims 6 and 7, if rewritten in independent form. As discussed below, however, Applicants submit that Claims 1-5 are allowable over the cited reference. Reconsideration is respectfully requested.

A. Rejection under 35 U.S.C. §102

The Action rejects Claims 1-5 as being anticipated by U.S. Patent No. 4,926,187 to Sugawara et al. (Sugawara).

Claim 1 is directed to a signal receiving system including the following elements:

- (i) a variable directivity antenna having its directivity varied in accordance with a control signal applied thereto;
- (ii) a control signal generator for generating said control signal;
- (iii) a modulator for modulating a carrier with said control signal from said control signal generator to develop a modulated signal; and
- (iv) a controller for demodulating said modulated signal to recover said control signal from said modulated signal and applying said recovered control signal to said variable directivity antenna to thereby vary the directivity of said variable directivity antenna.

The Examiner finds that Sugawara discloses a variable directivity antenna in FIG. 3B. It is not clear whether the Examiner means that the antenna 212/221 is a variable directivity antenna, or that the entire structure shown in FIG. 3B, i.e., the main unit, is a variable directivity antenna.

Turning first to the antenna 212/221, antenna 212/221 is not a variable directivity antenna. Antenna 212/221 is described as "a rectangular patch antenna." (See Column 7, Lines

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29-30). One of ordinary skill would understand that a simple rectangular patch antenna alone does not exhibit variable directivity.

Turning next to the main unit shown in FIG. 3B, this main unit is also not a variable directivity antenna. With the arrangement shown in FIG. 3B, the rectangular patch antenna 212/221 sends out a circularly polarized radio wave. (Column 7, Lines 37-38). A circularly polarized wave is a radio wave of which E and H fields rotate during its propagation through space, as described, for example, in the section entitled "Circular Polarization" (Pages 1-7 and 1-8) of The Right Antenna (Second Edition) (hereinafter, the "Exhibit"). In contrast, as described in the section entitled "Gain and Directivity" (Pages 1-8 and 1-9) of the Exhibit, the directivity intended in a variable directivity antenna is a direction in which the antenna concentrates its energy, and an antenna of which this direction is variable is a variable directivity antenna. With the arrangement shown in FIG. 3B of Sugawara alone, it is not possible to vary the direction in which the rectangular patch antenna 212/221 concentrates its energy. Rather, it requires additional arrangements to make it possible to vary the directivity of the rectangular patch antenna 212/221.

Further, if the Examiner's position is that the entire arrangement shown in FIG. 3B is a variable directivity antenna, then the modulator shown in FIG. 3B is part of the variable directivity antenna, and, therefore, it is not reasonable for the Examiner to find that a modulator is shown in FIG. 3B in addition to the variable directivity antenna of FIG. 3B, which already includes a modulator.

Still further, assuming for argument's sake that the Examiner's finding with respect to the variable directivity antenna and modulator are correct, the structure of FIG. 3B does not include a controller as claimed in Claim 1. Assuming for purposes of this argument that ASK MOD 111 of FIG. 3b is a modulator, then the hybrid disposed between ASK MOD 111 and the antenna 212/222, i.e., the quadrature phase device 211/222, would be the "controller" element referred to in Claim 1 of the present application. As recited in Claim 1, the controller operates to demodulate the modulated signal: "a controller for demodulating said modulated signal to

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recover said control signal from said modulated signal and applying said recovered control signal to said variable directivity antenna to thereby vary the directivity of said variable directivity antenna.” However, according to Sugawara, Column 7, Lines 30-34, the quadrature phase device 212/222 is a device which generates two microwaves Wa and Wb having quadrature phases, but does not demodulate modulated signals. Therefore, Sugawara does not disclose the recited controller of Claim 1.

For at least these reasons, it is submitted that Claim 1 and Claims 2-7, which depend from Claim 1, are not anticipated by the cited reference. Reconsideration and withdrawal of the anticipation rejection of Claim 1-5 are respectfully requested.

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IV. Conclusion

In view of the foregoing remarks and amendments, Applicants submit that this application is in condition for allowance at an early date, which action is earnestly solicited.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account 04-1679.

Respectfully submitted,

Dated: 5/1/06


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